development for this new medium.   (0 Refs)
    Subfile: C
    Descriptors: client-server systems; hypermedia markup languages;
information resources; integrated *voice*/data communication; online
front-ends; speech-based user interfaces
    Identifiers: VoiceXML; World Wide Web-based distributed conversational
applications; interpreter; *XML*-based markup language; distributed
Web-based *voice* services; content delivery; *voice*-response applications
; data services; client/server paradigm; application development
    Class Codes: C5260S (Speech processing techniques); C6130M (Multimedia);
C6140D (High level languages); C7210N (Information networks); C6180N (
Natural language processing); C7250N (Search engines); C6150N (Distributed
systems software)
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DIALOG(R)File   2:INSPEC
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6711084   INSPEC Abstract Number: C2000-11-5260S-001
  Title: The promise of a *voice*-enabled Web
    Author(s): Danielsen, P.J.
    Author Affiliation: Dept. of Software Production Res., Lucent Technol.
Bell Labs., Naperville, IL, USA
    Journal: Computer   vol.33, no.8   p.104-6
    Publisher: IEEE Comput. Soc,
    Publication Date: Aug. 2000 Country of Publication: USA
    CODEN: CPTRB4   ISSN: 0018-9162
    SICI: 0018-9162(200008)33:8L.104:PVE;1-Z
    Material Identity Number: C125-2000-008
    U.S. Copyright Clearance Center Code: 0018-9162/2000/$10.00
    Language: English   Document Type: Journal Paper (JP)
    Treatment: Practical (P)
    Abstract: Many computing professionals have heard of *XML*, and some use
it to describe text, images and other data with rich structure. The author
discusses an innovative use of *XML* , called VoiceXML, to support
human-computer dialogs via spoken input and audio output. VoiceXML defines
dialogs between humans and machines in terms of audio files to be played,
text-to-speech synthesis and speech recognition capabilities, and
touch-tone input. The author reviews the existing architectures for World
Wide Web and telephone services, describes how VoiceXML enables
consolidation of service logic for Web and phone, and summarizes the
features of the VoiceXML 1.0 specification. Implementation of VoiceXML
clients and VoiceXML services has begun in many of the VoiceXML Forum's
member companies and will soon be available in the marketplace. The World
Wide Web *Voice* *Browser* working group has adopted VoiceXML 1.0 as the
basis for the dialog markup language that is part of its speech user
interface framework.   (0 Refs)
    Subfile: C
    Descriptors: hypermedia markup languages; information resources; speech
recognition; speech synthesis; speech-based user interfaces
    Identifiers: *voice*-enabled World Wide Web; *XML*; VoiceXML 1.0
specification; human-computer dialogue; spoken input; audio output; audio
files; text-to-speech synthesis; speech recognition capabilities;
touch-tone input; service architectures; telephone services; service logic

consolidation; World Wide Web *Voice* *Browser*; dialogue markup language; speech user interface
    Class Codes: C5260S (Speech processing techniques); C7210N (Information networks); C6140D (High level languages); C6180N (Natural language processing)
    Copyright 2000, IEE

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6704307   INSPEC Abstract Number: B2000-10-6210R-072, C2000-10-3370G-001
    Title: Admission and flow control for multimedia CDMA
    Author(s): Comaniciu, C.; Mandayam, N.; Famolari, D.; Agrawal, P.
    Author   Affiliation: Wireless   Inf.   Network   Lab.,   Rutgers   Univ.,
Piscataway, NJ, USA
    Conference   Title: 2000   IEEE International Conference on Multimedia and
Expo.   ICME2000. Proceedings. Latest Advances in the Fast Changing World of
Multimedia (Cat. No.00TH8532)   Part vol.3   p.1265-8 vol.3
    Publisher: IEEE, Piscataway, NJ, USA
    Publication Date: 2000 Country of Publication: USA   3 vol. xxxv+17778
pp.
    ISBN: 0 7803 6536 4   Material Identity Number: XX-2000-01992
    U.S. Copyright Clearance Center Code: 0 7803 6536 4/2000/$10.00
    Conference   Title: Proceedings of International Conference on Multimedia
and Expo
    Conference   Date: 30   July-2 Aug. 2000   Conference Location: New York,
NY, USA
    Language: English   Document Type: Conference Paper (PA)
    Treatment: Practical (P)

    Abstract: QoS guarantees for an integrated CDMA system can be provided by a combination of admission and flow control. The admission control restricts the number of users in the system such that QoS requirements for all calls can be met. The flow control balances the system interference on a slot-by-slot basis such that bit error rate requirements are met for all users and the   real-time users are given the highest priority. In this paper, we analyze . the. . scenario of a single-cell DS-CDMA system carrying both *voice* and WWW users. A new admission control is proposed and analyzed for Web *browsing* *sessions* . The challenge in designing admission control for Web users is due to the fact that the Web traffic description is based on heavy tailed distributions. Thus, an accurate estimate for the average offered rate for a Web *session* is hard to compute. Our proposed admission scheme adaptively modifies the admission threshold at each time slot based on new average load measurements. The admission threshold is computed such that the probability of *session* dropping is maintained below a prescribed value. The flow control mechanism is an extension of the one proposed by C. Comaniciu et al. (2000), who used the residual capacity from *voice* users to allocate resources for WWW users. (12 Refs)
    Subfile: B C
    Descriptors: code division multiple access; flow control; information resources; integrated *voice*/data communication; multimedia communication; probability; quality of service; resource allocation; telecommunication congestion control; telecommunication traffic
    Identifiers: admission control; flow control; multimedia CDMA; sevice